

# Confessions of a dark matter detective

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by Andrea Albert

Fourteen thousand feet above sea level near a volcanic peak in Mexico sits a unique astronomical observatory. Instead of peering into space with a glass lens, it uses 300 huge barrels of water. And instead of focusing light, it aims digital sensors inside of each barrel to detect a ghostly blue light called Cherenkov radiation from high-energy particles whizzing through the water. In my work as one of the astrophysicists using the High-Altitude Water Cherenkov Observatory, better known as HAWC, I sift through data from those mountain-top water barrels looking for the fingerprint of one of the most elusive yet abundant quarries in the universe: dark matter.

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